



# New Solar Homes Partnership (NSHP) Training Workshop

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Efficiency & Renewable Energy Division  
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## Purpose

- Provide assistance to all parties participating in the NSHP program
  - Application Process
  - Required Documents
- Any comments or suggestions on improving the NSHP program can be sent to the California Energy Commission's Renewable Energy Office at [renewable@energy.state.ca.us](mailto:renewable@energy.state.ca.us)



# California Solar Initiative

CPUC's  
California Solar  
Initiative

1,940 MW

\$2.16 B

**CEC's New  
Solar Homes  
Partnership**

**400 MW**

**\$400 M**

Publicly-Owned  
Utility Solar  
Programs

700 MW

\$784 M



## New Solar Homes Partnership Program Goals

- Establish a self-sufficient solar industry where solar energy systems are a mainstream viable option for homes by 2016.
- Achieve 400 megawatts of installed solar electric capacity in California by the end of 2016.
- Place solar energy systems on 50% of new homes by end of program.



# New Solar Homes Partnership Program Eligibility



## Project Requirements

- Project located in one of four investor-owned electric service territories (PG&E, SCE, SDG&E, BVES).
- Solar energy system will be at least 1 kW AC or larger and interconnected with the utility grid.
- The electricity from the system will offset the end-use customer's electric load.
- The system will be composed of new certified components from the Energy Commission's Lists of Eligible Equipment and will be covered by a 10-year warranty.



## Project Requirements Cont.

- New residential construction
  - A residential building is considered “new” if the entire building structure is subject to current Title 24 Standards and does not yet have a certificate of occupancy.
  - Solar permit should be pulled prior to the issuance of the certificate of occupancy, but no later than 180 days after.
- Systems and energy efficiency measures are third-party verified.



## Energy Efficiency

- Project meets a minimum of 15 percent beyond current Building Energy Efficiency Standards (Title 24).
  - 2008 Building Energy Efficiency Standards
  - **Tier 1:** minimum 15 percent beyond Standard for combined space heating, cooling and water heating
  - **Tier 2:** minimum 30 percent beyond Standard for combined space heating, cooling and water heating and 30 percent for space cooling





## Retailers and Installers

- Contractors installing solar systems must have a California State A, B, C-10 or C-46 license. Solar systems can also be self-installed.
- Retailers and installers must self-register with the Energy Commission via the Go Solar California website.



## Project Types

- Custom Homes
- Solar as Standard
  - Projects/Phases of 6 or more homes AND
  - Solar on at least 50% of those homes
- Small Developments
  - Projects/Phases of less than 6 homes AND/OR
  - Solar on less than 50% of homes.



## Project Types

- Solar as an Option
  - Unclear which homes will receive solar.
  - Incentives reserved for up to 50% of the homes.
  - System size assumed to be 2kW initially.
  - Project status update required 18 months into the reservation period.
- Common Areas
  - Areas in the development that are reserved for the use of the residents.
  - Example: Recreation Center, Pool House, etc.



## Project Types

- Affordable Housing
  - At least 20% of the project units must be reserved for extremely low, very low, lower, or moderate income households for a period of at least 10 years.
  - Occupancy permits less than two years old.
  - Virtual Net Metering is allowed.



## Incentive Structure

- One-time, upfront incentive
- Incentives decline as megawatt targets are achieved
- Incentives decline to zero at the end of the program
- <https://www.newsolarhomes.org/RebateLevels.aspx>



## Expected Performance-Based Incentive

- The incentive amount is calculated using the CEC-PV Calculator
- The incentive amount is based on a calculation which compares the expected performance of the proposed system to a reference system



## Incentive Levels

### **Solar As Standard Feature Incentive - \$2.60/watt**

- Projects with six or more units where solar is installed on 50 percent or more of the units.
- 36-month reservation period

### **Base Incentive - \$2.50/watt**

- Custom homes
- Small developments
- Developments offering solar as an option\*
- Developments where solar is installed on less than 50 percent of the units
- Common areas
- 18-month reservation period

\*Solar as an Option projects will receive a 36-month reservation period.



## Incentive Levels – Affordable Housing

- \$3.50/watt for residential unit installations
- \$3.30/watt for common area installations
- 36-month reservation period
- Incentives decline over time as affordable housing megawatt targets are achieved (Decline schedule is separate from market-rate NSHP program)
- No specific set-aside of funding for affordable housing





## Leased Systems

- At a minimum, ten-year leased systems and power purchase agreements
- Lessor required to report the status of the system for the first five years
- If agreement is terminated AND system is removed within the first five years, then penalties for early removal



## System Upgrades

- If the installed system is larger than the one that was proposed at reservation time, the incremental increase in system size is calculated at the incentive level in effect at the time of reservation approval.



## Incentive Cap

- Incentives are for the first 7.5 kW AC of a system installed on a residential dwelling unit



## Cal Flex Install Criteria (CFI)

- Include flat installations in tilt range (0 degrees)
- CFI can only be used for new residential developments.
- CECPV Calculator Version 2.4.



# Additional NSHP Resources


[www.gosolarcalifornia.org](http://www.gosolarcalifornia.org)

Go Solar California! - Windows Internet Explorer

http://www.gosolarcalifornia.ca.gov/

Go Solar California!

Existing Homes New Homes Nonresidential Builders Installers News Room Calendar Search Site



**Most Popular Links**

- Solar Contractors, Installers & Retailers Database
- Calendar
- CSI Information
- Documents & Handbooks
- Eligible Equipment
- Find Your Utility
- NSHP Communities
- NSHP Guidebook & Forms
- Solar for Affordable Housing
- Solar for Existing Homes - CSI
- Solar for New Homes - NSHP
- Solar 101 (All About Solar Energy)


**Residential Solar Info**

- Solar for EXISTING Homes
- Solar for NEW Homes
- Info for Builders & Developers
- Solar Contractors, Installers & Retailers Database

**Nonresidential Solar Info**


- Agriculture
- Commercial Buildings
- Industrial Buildings
- Local Government
- Nonprofit Organizations
- Solar Schools
- Solar Performance

Welcome to the Go Solar California website brought to you by California's Public Utilities Commission and Energy Commission. This site provides consumers a "one-stop shop" for information on rebates, tax credits, and incentives for solar energy systems in California.



**Solar for Your Home**

You can use the power of the sun, along with energy efficiency in your home, to help reduce your electricity bills by up to 60 percent or more! Find out about incentives for installing solar on your existing home or about buying a new home in one of California's solar communities. [MORE...](#)



**Builders, Developers, and Installers**

If you're a builder or developer, are building your own home, or are a solar installer, find the information that's right for you on our [Solar Industry Page](#).



# Additional NSHP Resources

<http://www.gosolarcalifornia.ca.gov/nshp/training/index.html>

New Solar Homes Partnership Training - Windows Internet Explorer

http://www.gosolarcalifornia.ca.gov/nshp/training/index.html

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New Solar Homes Partnership Training

Existing Homes New Homes Nonresidential Builders Installers News Room Search This Site

**GO solar CALIFORNIA**

*A new solar home will help you save money and the environment!*

**LENNAR**

**NSHP Links**

- NSHP Main Page
- Plan for Energy Efficiency First
- NSHP Calculator
- NSHP Eligible Equipment
- NSHP Guidebook
- NSHP Workshops & Training
- Eligible Utilities
- NSHP Advisory Committee
- Contact Us

**Go Solar E-Mail List Server**

To subscribe to our Go Solar e-mail ListServer, enter your e-mail address completely:

Note: Your e-mail address must be exact and complete. Incorrect or incomplete addresses will not work. You will receive a welcoming e-mail to confirm your subscription.

**New Solar Homes Partnership Training**

**Training Events**

**June 01, 2010**  
New Training Workshop Opportunity New Solar Homes Partnership

**June 24, 2010**  
New Training Workshop Opportunity New Solar Homes Partnership

**June 25, 2010**  
New Training Workshop Opportunity - New Solar Homes Partnership

WebEx instructions are now available through the workshop link above.

**WebEx Tutorial Training Files**

The New Solar Homes Partnership provides online training through WebEx tutorials. These tutorials were created as an additional training aid for the NSHP Web Tool application process. Please refer to the NSHP Guidebook and NSHP Help Manual for additional detailed information.

Please note: No software is needed: The WebEx player is automatically installed when you click the link to begin playback. Problems with playback? Please contact WebEx technical support at 1 866-229-3239.

Date	Title	Duration
10/23/08	Introduction to the Web Tool	00:42
10/24/08	Getting Started	02:52
10/23/08	Adding a Project and Associate	03:55





## Additional NSHP Resources

<http://www.cabec.org/>

Welcome to CABEC - California Association of Energy Consultants - Windows Internet Explorer

http://www.cabec.org/

File Edit View Favorites Tools Help

Welcome to CABEC - California Association of Energy Consultants

Members Log-in Forgot Password?

**Public Area**

- Public Home
- Contact CABEC
- About CABEC
- Announcements
- Become A Member
- Calendar of Events
- CEA and CEPE
- Education & Training
- General Interest
- Job Connections
- Member Directories
- Register for Events
- Scholarship Program
- Solar
- Title 24 Information

**MEMBERS AREA**

- Members Area Return
- Public Home
- Members Home
- 2005 Standards (CEC)
- 2008 Standards
- CABEC Newsletter
- Industry Links
- Job Connections
- Meeting Minutes
- Member Discounts
- Presentations
- Rebates & Incentives

**Welcome to CABEC**

CABEC Members Roster  
CABEC Members and Non-Member CEPE and/or CEA Associates by Profession

**Announcements** **Find an Energy Professional** **Update Profile**  
**Log/View CEA CEU Training**

REGISTER FOR THE SAN LUIS OBISPO CONFERENCE BELOW!

**NEW** (posted 25 Dec 2009) — The 2009 CABEC Hall of Fame Award Has Been Announced!  
CABEC's Board of Directors is proud to announce that *Julieann Summerford* is the recipient of the prestigious CABEC Hall of Fame Award for 2009. Congratulations to Julieann!  
[CLICK HERE to view Julieann's biography](#)

**NEW** (posted 16 Dec 2009) — 2010 Spring CEPE 2008 Standards Training & Exams  
You may now register for 2010 Spring CEPE 2008 Standards Training and Exams. [CLICK HERE to register now.](#)

**NEW** (posted 13 Dec 2009) — 2010 Winter Regional Meetings (Mark your calendars!)  
February 2 in Downey (Southern)  
February 17 in Sacramento (Northern)  
This presentation will give attendees an introduction to the HERS measures, their contribution and the effects they have on the construction process when using the measures under the performance method of showing Title24 compliance. It is slated to be a one of a kind presentation, focusing on the pros and cons of each measure, including added cost and the difficulty of meeting the requirements set forth by the standards. Attendance is free for CABEC Members.  
**Registration will begin in early January so please keep checking back.**

(posted 30 Nov 2009) — **Renew your CABEC Membership Online**  
Login to the Members Area and click the membership renewal link at the top of the page beneath your name.

[Click Here for SLO Conference Information and Registration](#)

Search

Google™ Custom Search

**JOIN CABEC!**

**Member Vendors**  
(Click image to link)

**All CABEC Vendors**

**Special Features**

- Slideshows & Presentations
- Benefits of Going Green & Sustainable (Ideas/News/Articles) (last updated 05 Jan 2009)

**Quick Links**

- Next Event
- CEPE ROSTER Page View
- CEPE Trainings & Exams for 2008 Standards
- CEA ROSTER Page View
- CEA Application



# Additional NSHP Resources

<https://www.calcerts.com/>

CalCERTS - Home - Windows Internet Explorer

https://www.calcerts.com/

File Edit View Favorites Tools Help

CalCERTS - Home

**CalCERTS, Inc.**  
Home Energy Rating Systems - HERS  
California's Premier Home Energy Rating Provider

**Welcome to CalCERTS**

If you are a Current/Returning CalCERTS HERS rater, user or business associate and already have a login and password then proceed to login (to the right top of screen).

If you are New to CalCERTS and are seeking further information, please be sure to read [About Us](#), to get an overview of our expertise and services. Get all of the latest information you need by following the links below.

Access to our online registry data base is restricted to CalCERTS raters, users and other business affiliates.

Please [contact us via email](#) regarding questions or comments about the website.

**Current Raters & Users Log in Here:**

Login

Password

Login

Forgot Login or Password?  
[Click Here](#)

**newsworthy**

**New for 2010**  
Energy Consultants can register themselves and their CF-1R for Compliance with CalCERTS!

[Field Testing]

**CalCERTS, Inc is approved for 2008 Building Energy Standards**

**CEC 2008 Standards Forms**

[CalRatePRO]

**HERS Rater Information**

- HERS Rater Login - Already Certified
- HERS Support - Current User
- HERS Rater - How to Get Certified?
- HERS Rater - How to Locate One?

**Solar Information**

- Solar Rater Login - Already Certified
- Solar Support - Current User
- Solar Rater - How to Get Certified?
- Solar Rater - How to Locate One?

**Homeowner/Consumer Information**

- Locate a Certified HERS Rater
- Homeowner/Consumer Information

**Builders/HVAC Contractors Information**

- Locate a Certified HERS Rater
- Builders/HVAC Contractors Information

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[Terms and Conditions] [Privacy Statement]  
CalCERTS, Inc., 31 Natoma St Suite 120, Folsom, CA 95630  
Office: 916-985-3400, Toll Free: 877-HERS-R8R, (877-437-7787)





# Additional NSHP Resources

<http://www.cheers.org/>

Overview - Windows Internet Explorer

http://www.cheers.org/

File Edit View Favorites Tools Help

Overview

**CHEERS**  
California Home Energy Efficiency Rating Services

Home About Us Library Raters Registry

You are here [Home](#) [Overview](#) [Register](#) [Login](#)

Welcome to CHEERS

**CHEERS® for Homeowners**

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- ▶ [Own or buying an older home?](#)
- ▶ [Need to have HVAC work done?](#)

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- ▶ [Are you a Builder?](#)
- ▶ [Are you an HVAC Contractor?](#)
- ▶ [Are you with a Building Department?](#)
- ▶ [Are you in the Energy Business?](#)

**CHEERS® for Raters**

- ▶ [Find a Rater](#)
- ▶ [Become a Rater](#)
- ▶ [CHEERS Rater Support](#)
- ▶ [Event Calendar](#)
- ▶ [Go to the Registry \(2005 Standards\)](#)
- ▶ [Go to registering CF-1R's](#)
- ▶ [Download Software](#)

**NEW for 2010 !!!**

**Energy Consultants** can now use this web site to register CF-1R documents into the CHEERS Document Registry.  
[Click here](#)

**Project Owner** document signing. Required to have CEC energy forms registered for your projects.  
[Click here](#)

**Building Department** document registration verification.  
[Click here](#)

**Find a CHEERS® Certified Rater.**

**Want to be a CHEERS®**



## Additional NSHP Resources

- NSHP CECPV Calculator
  - <http://www.gosolarcalifornia.ca.gov/nshpcalculator/index.html>
- NSHP Web Tool
  - <https://www.newsolarhomes.org>
- Register for the GoSolar Retailer/Installer List
  - <http://www.gosolarcalifornia.ca.gov/database/addcompany.php>
- Check the Eligible Equipment Lists
  - <http://www.gosolarcalifornia.ca.gov/equipment/index.html>



## FAQ's

- What's the current incentive level?
  - <https://www.newsolarhomes.org/RebateLevels.aspx>
- How many MW's have been reserved/are under review?
- How will I know when the incentive level will drop?
- Where should I send my reservation package and payment claim package?
  - <http://www.gosolarcalifornia.ca.gov/contactus.html>



## FAQ's

- What if my reservation has expired?
- How does a retailer get added to the online registered retailer list?
  - <http://www.gosolarcalifornia.ca.gov/database/addcompany.php>
- When will the next training be held?
  - <http://www.gosolarcalifornia.ca.gov/nshp/training/index.html>
- Other questions?



## Contact Information

- <http://www.gosolarcalifornia.ca.gov/contactus.html>
- PG&E
  - [solar@pge.com](mailto:solar@pge.com)
  - 1-877-743-4112
- SCE
  - [NSHP@sce.com](mailto:NSHP@sce.com)
  - 1-866-584-7436
- SDG&E
  - [newsolarhomes@sdge.com](mailto:newsolarhomes@sdge.com)
  - 1-866-631-1744